

COVER SHEET (PAGE 1 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Proposal Title: Clear Lake Wetlands Restoration
 Applicant Name: Lake County Sanitation District (Attention: Mark Dellinger)
 Mailing Address: 230A Main Street, Lakeport, CA 95453
 Telephone: 707/263-2273
 Fax: 707/263-3836

Amount of funding requested: \$ 1,000,000 for 1 years

Indicate the Topic for which you are applying (check only one box). Note that this is an important decision: see page of the Proposal Solicitation Package for more information.

- | | |
|---|---|
| <input type="checkbox"/> Fish Passage Assessment | <input type="checkbox"/> Fish Passage Improvements |
| <input checked="" type="checkbox"/> Floodplain and Habitat Restoration | <input type="checkbox"/> Gravel Restoration |
| <input type="checkbox"/> Fish Harvest | <input type="checkbox"/> Species Life History Studies |
| <input type="checkbox"/> Watershed Planning/Implementation | <input type="checkbox"/> Education |
| <input type="checkbox"/> Fish Screen Evaluations - Alternatives and Biological Priorities | |

Indicate the geographic area of your proposal (check only one box):

- | | |
|---|---|
| <input type="checkbox"/> Sacramento River Mainstem | <input checked="" type="checkbox"/> Sacramento Tributary: <u>Clear Lake/Cache Creek</u> |
| <input type="checkbox"/> Delta | <input type="checkbox"/> East Side Delta Tributary: <u> </u> |
| <input type="checkbox"/> Suisun Marsh and Bay | <input type="checkbox"/> San Joaquin Tributary: <u> </u> |
| <input type="checkbox"/> San Joaquin River Mainstem | <input type="checkbox"/> Other: <u> </u> |
| <input type="checkbox"/> Landscape (entire Bay-Delta watershed) | <input type="checkbox"/> North Bay: <u> </u> |

Indicate the primary species which the proposal addresses (check no more than two boxes):

- | | |
|--|--|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | |
| <input type="checkbox"/> Winter-run chinook salmon | <input type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon | <input type="checkbox"/> Fall-run chinook salmon |
| <input type="checkbox"/> Delta smelt | <input type="checkbox"/> Longfin smelt |
| <input type="checkbox"/> Splittail | <input type="checkbox"/> Steelhead trout |
| <input type="checkbox"/> Green sturgeon | <input type="checkbox"/> Striped bass |
| <input checked="" type="checkbox"/> Migratory birds | |



PSP May 1998

COVER SHEET (PAGE 2 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Indicate the type of applicant (check only one box):

- | | |
|---|---|
| <input type="checkbox"/> State agency | <input type="checkbox"/> Federal agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input type="checkbox"/> Non-profit |
| <input checked="" type="checkbox"/> Local government/district | <input type="checkbox"/> Private party |
| <input type="checkbox"/> University | <input type="checkbox"/> Other: _____ |

Indicate the type of project (check only one box):

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Planning | <input checked="" type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Education |
| <input type="checkbox"/> Research | |

By signing below, the applicant declares the following:

- (1) the truthfulness of all representations in their proposal;
- (2) the individual signing the form is entitled to submit the application on behalf of the applicant (if applicant is an entity or organization); and
- (3) the person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section H.K) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.


(Signature of Applicant)



PSP May 1998

EXECUTIVE SUMMARY

Project Title And Applicant Name

Title: Clear Lake Wetlands Restoration

Applicant: Lake County Sanitation District (LACOSAN)

Project Description And Primary Objectives

LACOSAN proposes that CALFED join an ongoing multi-agency initiative to restore the ecosystem of one of northern California's most significant watersheds: the Clear Lake basin. LACOSAN proposes a \$1 million CALFED cost share as a 3% participation in the \$29 million second phase of Basin 2000. The second phase of Basin 2000 includes construction of 266 acres of wetlands using recycled wastewater effluent at 16 sites surrounding Clear Lake. The proposed \$1 million CALFED cost share will be applied to construction of the wetlands and associated facilities. The project's primary objectives are restoration and improvement of migratory bird habitat, and water quality improvements in Clear Lake and the Sacramento River tributary system. The project is located in the Cache Creek ecological unit of the Yolo Basin ecological zone.

Approach/Tasks/Schedule

LACOSAN is one of several agencies implementing Lake County watershed plans and policies that rank wetlands restoration as one of the top priority measures for improving wildlife habitat and Clear Lake water quality generally. LACOSAN's portion of the watershed initiative is a 20-year master plan for establishing 1,000 or more acres of wetlands using recycled wastewater effluent at multiple locations selected for their ecological effectiveness around Clear Lake. The project's major tasks and schedule includes:

<u>Task</u>	<u>Schedule</u>
1. Planning/project management	Ongoing
2. Environmental review	
2.1 CEQA EIR	Completed 1997
2.2 NEPA EA	In progress; completion 10-98
2.3 Baseline monitoring	Ongoing
3. Engineering	
3.1 Reconnaissance	Completed 1997
3.2 Preliminary	In progress; completion 8-98
3.3 Final	Completion 1999
3.4 Construction Services	1999-2000
4. Construction	
4.1 FCF	1999-2000
4.2 Pipeline	1999-2000
4.3 Wetlands	1999-2000
5. Operation	
5.1 Start-up/testing	2000
5.2 Monitoring	Ongoing upon start-up

Justification

Clear Lake, California's largest freshwater lake completely within the state border, has lost approximately 85% of its surrounding wetlands to urbanization and agricultural development. These wetland losses have contributed to serious reductions in migratory bird habitat, as well as degradation of water quality generally in Clear Lake and its out-flow to the Sacramento River via Cache Creek. The proposed wetlands restoration is an important early phase in a long-term watershed initiative to improve the basin's ecosystem. It is

distinguished by a partnership of agencies assembled by Lake County to collaboratively implement corrective actions.

Budget Cost And Third Party Impacts

This phase of Basin 2000 is budgeted at \$29 million, including the first increment of 266 acres of wetlands and associated effluent delivery and wastewater system upgrades. These costs and funding sources are itemized as follows:

<u>Budget</u>	<u>\$ Million</u>	<u>Funding Sources</u>	<u>\$ Million</u>	<u>% of Total</u>
Wastewater system upgrades	7.6	Lake County ratepayers	7.0	24
Effluent flow control facility	5.8	U.S. EPA	7.0	24
Wetlands interconnection pipeline	12.6	CEC and WCB	6.0	20
Wetlands construction	<u>3.0</u>	Corps of Engineers	5.0	18
	29.0	SWRCB Small Communities Grant	3.0	11
		CALFED	<u>1.0</u>	<u>3.0</u>
			29.0	100

The CALFED cost share of \$1 million will be applied to construction costs for the wetlands and interconnection pipeline. The project's third party impacts include: 1) improved bird watching and hunting for recreationists in the region; 2) improved water quality for 36 public drinking water systems that draw supplies from Clear Lake; and 3) improved water quality generally for recreationists using Clear Lake and Cache Creek.

Applicant Qualifications

The Lake County Sanitation District (LACOSAN) is a special service district operated by Lake County that provides wastewater services countywide. The District is governed by a board of directors, who are also the County's Board of Supervisors. LACOSAN operates two regional and two local wastewater systems with a workforce of 40 employees and an annual budget of approximately \$5 million. The agency has over 25 years of experience administering state and federal financial assistance for capital improvement projects of the type proposed herein. It has just led eleven other partners in the successful construction and start-up of Basin 2000's \$45 million Phase 1 system that recycles wastewater effluent for upland habitat restoration and geothermal power generation.

Monitoring and Data Evaluation

Extensive monitoring of the Clear Lake watershed is a historical and ongoing effort of Lake County and cooperating state and federal resource organizations. The University of California (Davis) maintains a permanent monitoring and evaluation office in the County. This effort will be expanded to encompass the proposed wetlands and their effect on the watershed's ecosystem. LACOSAN believes emphasis must be placed on thorough monitoring of the initiative's first increment of 266 acres of wetlands in order to ultimately accomplish the 20-year goal of at least 1,000 acres of restored wetlands.

Local Support/Coordination

A hallmark of Lake County's watershed projects is interagency cooperation. The proposed project has been reviewed and endorsed by the local watershed planning organization (the County Resource Management Coordinating Committee as listed in Attachment A), and is being implemented through a partnership of local, state, and federal agencies. This is the same approach the County used to successfully implement the 1990-97 first phase of Basin 2000.

TITLE PAGE

Project Title

Clear Lake Wetlands Restoration.

Applicant

Lake County Sanitation District (LACOSAN).

Organization Type And Tax Status

Local government special service district, not taxable.

Tax Identification Number

95-6000825

Participants/Collaborators

Planning and policy guidance is provided by one dozen local, state, and federal agencies, and private organizations, that constitute the Lake County Resource Management Coordinating Committee (see Attachment A). Committed funding partners include U.S. EPA, U.S. Corps of Engineers, and California Water Resources Control Board. In addition to CALFED, proposed funding partners also include the California Wildlife Conservation Board and California Energy Commission.

PROJECT DESCRIPTION

Project Description And Approach

The project is the second phase of a multi-phase, multi-year initiative to restore the ecosystem of the Clear Lake basin. The project proposed herein is a component of the larger initiative and includes construction of 266 acres of wetlands located at 16 sites around Clear Lake. Water for supplying the wetlands will be provided from recycled wastewater effluent. The source of wastewater effluent is LACOSAN's Northwest Regional Wastewater Treatment Plant located at Lakeport. The proposed wetlands system includes effluent storage at the treatment plant and a pipeline to convey effluent to the multiple wetland sites. The wetlands, flow control facility, and pipeline components are described further as follows:

- Wetlands. This component includes creation of 16 wetland sites totaling 266 acres. The wetlands will be constructed by creating levees in existing dry channels, and grading and shaping to create inter-mixed areas of deep water and shallow marsh habitat. A mix of open water/emergent marsh will be established to provide preferred habitat for a broad variety of wetland-dependent birds and mammals. Treated effluent will be stored and conveyed to the wetlands via the FCF and pipeline, respectively, and introduced to the wetland cells through buried pipes into deepwater and inlet zones. During effluent application periods (primarily the summer months) these wetlands will be hydraulically loaded at rates that are balanced by the on-site losses of water through evaporation and transpiration by wetland vegetation. There will be no surface releases of treated effluent, consistent with the requirements of the Regional Water Quality Control Board. During wet periods, effluent application will cease and stormwater flows will be allowed to accumulate in the wetland cells, providing flood detention and water quality improvement prior to release to downstream waters. LACOSAN already owns approximately half of the sites; the remaining sites will be acquired from willing property owners. No condemnation of property will be used in the project.
- Flow Control Facility (FCF). The FCF is required to store effluent during the winter periods when high effluent flows are experienced, and effluent use by the wetlands is not always possible. The FCF will have a capacity of approximately 2,300 acre-feet. Current storage at LACOSAN's Northwest Treatment Plant is insufficient to achieve this storage during wet winters. The FCF will also provide continuous summer flows to the wetlands, when water use demands are highest and effluent flows will need to be managed to sustain plant and aquatic life.
- Pipeline. This component includes a pipeline and two pump stations required for supplying wastewater effluent from the FCF to the multiple wetland sites. The pipeline will also receive operational transfers from one wetland for reuse at another wetland site further along the pipeline. The pipeline will be 16 inches in diameter, and will begin at a pump station located at the FCF at LACOSAN's Northwest Treatment Plant. From there it will extend approximately 19 miles along the north shore of Clear Lake to an intermediate booster pump station located near the Clearlake Oaks effluent disposal ponds. From that booster pump station, the pipeline will extend south and east approximately two miles and terminate at LACOSAN's Southeast Treatment Plant. Pipe materials will include both ductile iron and PVC. It will be installed at depths appropriate for the adjacent buried utilities and traffic conditions (typically 3 to 4 feet of cover). The pump stations will consist of multiple vertical turbine or horizontal split-case pumps with automatic controls to stop the flow in the event of an emergency. Pump controls and electrical equipment will be located in a building to protect them from the elements and reduce noise impacts. Depending upon final design, surge tanks or other surge facilities will be located adjacent to the pump stations. Pump operating conditions and control data will be transmitted to LACOSAN's computer system for monitoring and automatic/operator control.

LACOSAN initiated this project in 1997 with master planning, reconnaissance engineering, and preparation of a CEQA environmental impact report. During 1998, preliminary engineering and a NEPA environmental assessment will be completed, and final engineering initiated. Based on current funding expectations, final engineering and permitting will be completed in 1999, along with construction groundbreaking. Construction is expected to require at least two construction seasons because of restrictions on wintertime earth work.

Construction is expected to be completed in 2000, to be followed by operational testing and commencement of long-term monitoring.

Proposed Work Scope

The detailed work scope, schedule, and deliverables for the project are given in Table 1.

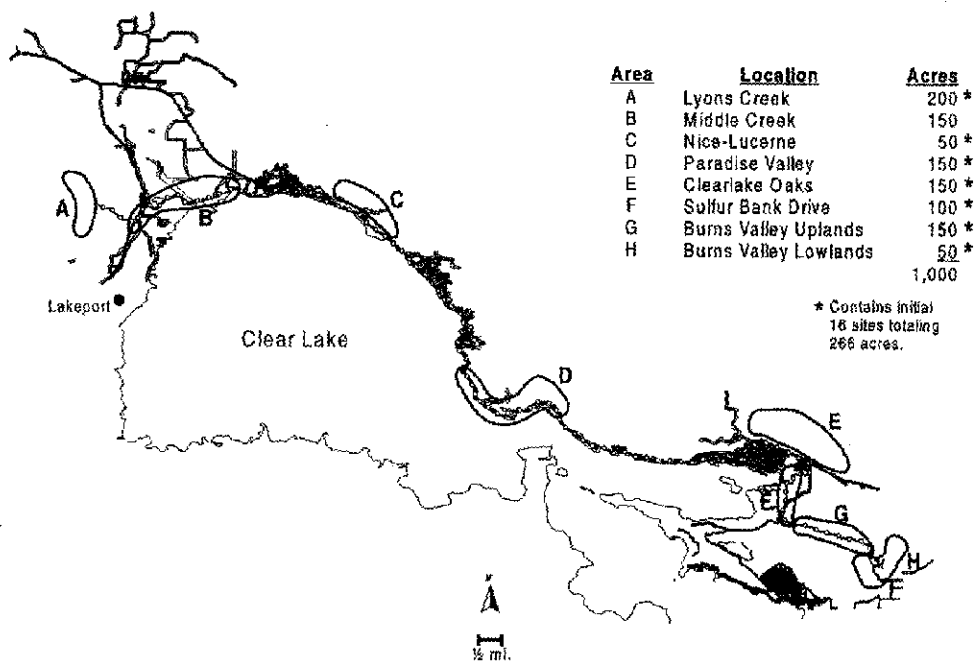
Project Location

The project location is shown in relation to Clear Lake in Figure 1. The entire project is located within Lake County and the Clear Lake watershed (defined by CALFED as the Cache Creek ecological unit of the Yolo Basin ecological zone).

Table 1
PROJECT WORK SCOPE

Task	Work to be Completed	Schedule		Budget (\$)	Deliverable
		Start	Complete		
1. Planning/project management	20-year master plan; team coordination; permitting.	Mar 1997	Dec 2000	200,000	Master plan; budget and schedule updates; progress reports.
2. Environmental review					
2.1 CEQA EIR	EIR	Jan 1997	Nov 1997	80,000	EIR
2.2 NEPA EA	EA	Jan 1998	Nov 1998	110,000	EA
2.3 Baseline monitoring	Background biological/ecological conditions.	1970	Ongoing	50,000/yr.	Multiple evaluation reports.
3. Engineering					
3.1 Reconnaissance	Conceptual engineering.	Apr 1997	Dec 1997	20,000	Design concepts and cost estimates.
3.2 Preliminary	Site evaluation/mapping/preliminary facility design.	Mar 1998	Aug 1998	190,000	Project maps/drawings/preliminary design report.
3.3 Final	Final plans and specifications/construction documents.	Sep 1998	Apr 1999	1,761,000	Construction plans and specifications/bidding documents.
3.4 Construction services	Construction supervision/testing/design modification.	Apr 1999	Dec 2000	2,020,000	As-built drawings, test/acceptance reports.
4. Construction					
4.1 FCF	FCF construction.	Apr 1999	Nov 1999	5,000,000	Constructed facility.
4.2 Pipeline	Pipeline construction.	Apr 2000	Dec 2000	10,600,000	Constructed facility.
4.3 Wetlands	Wetlands construction	Apr 1999	Dec 2000	2,000,000	Constructed facilities.
4.4 Wastewater system	Upgrade construction	Apr 1999	Dec 2000	7,000,000	Constructed facilities
5. Operation					
5.1 Start-up/testing	System testing/acceptance.	Nov 1999	Dec 2000	15,000	O&M manuals, testing/acceptance reports.
5.2 Monitoring	Biological/ecological monitoring	Oct 1999	Ongoing	25,000/yr.	Periodic monitoring reports.

Figure 1
20-YEAR WETLANDS RESTORATION PLAN



Expected Benefits

The project is intended to benefit the priority species of migratory birds, including both waterfowl guild and neotropical migratory bird guild. Many of these species migrate through, winter, or breed in the Clear Lake basin. They are a significant component of the Clear Lake ecosystem, are of high interest to recreational hunters and bird watchers, and contribute substantially to the watershed's economy. Representative species include: canvasback, mallard, pintail, snow geese, and Canadian geese.

The proposed project will benefit these migratory birds by addressing the stressors of marshplain and land-use changes. The project will restore wetlands in former marshplain areas, thereby strengthening hydrological and physical integration of bird habitat around the northern half of the Clear Lake shoreline. Land-use alteration stresses will be eliminated by the fact that project facilities will be owned by LACOSAN and permanently dedicated to wetland habitat.

Potential benefits to third parties will include: 1) increased and healthier migratory bird populations for recreationists; and 2) improved Clear Lake water quality for 36 public water systems that draw their supplies from Clear Lake, and for recreationists using the Lake and Cache Creek.

Background And Justification

Since the turn of the century, the Clear Lake watershed has lost approximately 85% of its wetlands as a result of urbanization, agricultural conversion, and other development pressures. This loss has seriously impacted fish and wildlife habitat, water retention capabilities, water quality, and the watershed's ecological health generally. These deteriorating conditions have been thoroughly documented by exhaustive field assessments. In particular, wetland loss and the resulting loss of nutrient cycling and buffering has led to elevated concentrations of nutrient-laden sediment flows into the lake. Wetland losses have also removed important wildlife breeding grounds and spawning habitat. There is uniform agreement in technical analyses that wetlands restoration is a critically-needed step towards restoring ecological health for one of California's most significant watersheds.

The importance of wetlands to Clear Lake's fisheries is illustrated by recent studies showing that the sections of the Clear Lake shoreline that have been cleared of tules generally support 103 to 145 fish per mile of shoreline, whereas shoreline with dense tules supports 1,118 fish per mile. The introduction of various non-native fishes and the loss of wetlands have greatly changed the composition of Clear Lake fisheries. The Clear Lake hitch and Sacramento perch are now listed by California Department of Fish and Game as "species of special concern," and several species are no longer found in Clear Lake.

Overall wetland loss in the Clear Lake watershed and the resulting loss of nutrient cycling and buffering in those wetlands are potentially important contributors to elevated concentrations of nutrient-laden sediment flows into Clear Lake. There were major wetland losses in the Clear Lake tributaries in the early 1900s when the Robinson Lake wetlands on Middle Creek and the Tule Lake wetlands on Scotts Creek were drained and reclaimed for agricultural uses. The amount of existing wetlands has dropped from approximately 9,000 acres before 1900 to approximately 1,500 acres today.

In all, about 200 species of birds are known to inhabit the Clear Lake ecosystem on a seasonal or year-round basis. Several state- and federally-listed endangered species, proposed endangered and threatened species, and candidate endangered and threatened species are found in the Middle Creek and Clear Lake area. The marsh areas around Clear Lake are an important breeding ground for western grebes, which are recovering from a serious decline caused by human disturbance, habitat destruction, drought, and pesticide use in Clear Lake. The destruction of spawning habitat and the construction of water diversions and barriers in Clear Lake's wetlands and tributaries have contributed to the decline of native fish species, including endemic native fish such as Sacramento perch and the Clear Lake hitch.

Justification for the proposed project was recently reconfirmed by the U.S. Corps of Engineers in a June 1998 watershed restoration analysis (Section 905b reconnaissance report). The Corps of Engineers concluded that the proposed wastewater-to-wetlands system "is consistent with implementing guidance of Section 503 of the Water Resources Development Act of 1996," and that the wetlands system will "provide

substantial benefits for the Clear Lake watershed specifically for the following purposes: a) management and restoration of water quality; b) control and remediation of sediment inflow to Clear Lake; c) restoration of degraded wetlands; and d) restoration of habitat for California native species."

The proposed wetlands restoration project is consistent with the following ERPP objectives for the Cache Creek ecological unit of the Yolo Basin ecological zone:

Upper watershed processes/restoration	Page 332, Vol. 2
Riparian and aquatic habitat/restoration	Page 332, Vol. 2
Contaminants/reduce aquatic loadings	Page 335, Vol. 2

The project's support for these objectives will be especially durable given that the wetlands will be operated permanently by LACOSAN as components of the regional utility systems. In addition to their ecological benefits, the wetlands will also be used by LACOSAN as public interpretive and education centers to further strengthen public support for watershed restoration.

The project was initiated in 1997 and is scheduled for completion in 2000. Of the \$29 million total cost, approximately 22% has been acquired or committed and the balance is being proposed to prospective collaborators such as CALFED.

Monitoring and Data Evaluation

The project will include a comprehensive monitoring program as itemized in Table 2. The program will be conducted by LACOSAN staff on a continuous basis over the operational life of the facilities. Data will be shared with members of the watershed planning organization (Attachment A), particularly the University of California's Clear Lake research station. LACOSAN foresees no difficulty maintaining and transferring the data to a storage system of CALFED's choice. LACOSAN believes that the monitoring program will provide critical support for subsequent phases of wetlands restoration to reach the 20-year goal of 1,000 acres or more.

Implementability

As the second phase of a multi-phase watershed program underway since 1990, the project is considered to be highly implementable. The applicant completed a CEQA EIR for the project in 1997 that identified no impediments or encumbrances. A companion NEPA EA that will be completed in late 1998 is finding the same implementation feasibility. On the design and construction side, reconnaissance and preliminary engineering have not identified any barriers to timely, cost-effective implementation. Further, a series of public meetings to explain the project and solicit citizen and property owner input have identified no objections or opposition. LACOSAN intends on continuing its agency coordination through the local watershed planning organization (Attachment A), and its public involvement through periodic outreach and information meetings with local property owners and the general public. Again, LACOSAN believes that public awareness and support will be a key foundation for long-term restoration work. It is essential that the County's residents and businesses be thoroughly involved throughout this process.

Table 2
WETLANDS MONITORING PLAN

<u>Parameters</u>	<u>Sample Locations</u>	<u>Sample Frequency</u>
Temperature, dissolved oxygen, pH, conductivity	Inflow(s) and outflow(s)	Daily
BOD ₅ , TSS, Cl, SO ₄	Inflow(s) and outflow(s)	Monthly
NO ₂ + NO ₃ - N, NH ₄ - N, TKN, TP	Inflow(s) and outflow(s)	Quarterly
Metals, organic, toxicity	Inflow(s) and outflow(s)	Annual
Flow	Inflow(s) and outflow(s)	Weekly
Rainfall	Adjacent to wetland	Daily
Water stage	Within wetland	Daily
Plant cover for dominant species	Near inflow, near wetland center, near outflow	Annually
Wildlife	Species census/diversity	Quarterly

COSTS AND SCHEDULE

Budget Costs

The project budget is shown in Table 3.

Schedule Milestones

The project schedule is shown in Table 4.

Third Party Impacts

The project will have the following third party impacts:

Recreationists	Increased/healthier migratory bird populations; improved Clear Lake water quality for marine recreation
Public water systems	Improved Clear Lake water quality

Table 3
PROJECT BUDGET

	Direct Labor Hours (a)	Direct Salary & Benefits (a)	Overhead Labor (a)	Service Contracts	Material/ Acquisition Contracts (b)	Misc./Other Direct Costs	Total Cost	Funding Source
1. Planning/project				200,000			200,000	EPA/LACOSAN
2. Environmental review								
2.1 CEQA EIR				80,000			80,000	LACOSAN
2.2 NEPA EA				110,000			110,000	EPA
2.3 Baseline monitoring				50,000			50,000	UCD/EPA
3. Engineering								
3.1 Reconnaissance				20,000			20,000	LACOSAN
3.2 Preliminary				190,000			190,000	EPA
3.3 Final				1,761,000			1,761,000	EPA/COE
3.4 Construction				2,020,000			2,020,000	EPA/COE
4. Construction								
4.1 FCF				5,000,000			5,000,000	Multiple
4.2 Pipeline				10,600,000			10,600,000	Multiple
4.3 Wetlands				2,000,000			2,000,000	Multiple
4.4 Wastewater upgrades				77,000,000			77,000,000	LACOSAN
5. Operation								
5.1 Start-up/testing				15,000			15,000	LACOSAN
5.2 Monitoring				25,000			25,000	LACOSAN
Total				99,071,000			99,071,000	

(a) LACOSAN's direct labor and costs are estimated to be 1.5 FTE for 36 months and associated office expenses for a total of \$375,000. The source of funding for these expenses is LACOSAN's annual operating budget.

(b) Construction materials are included in construction service contracts.

1-09131

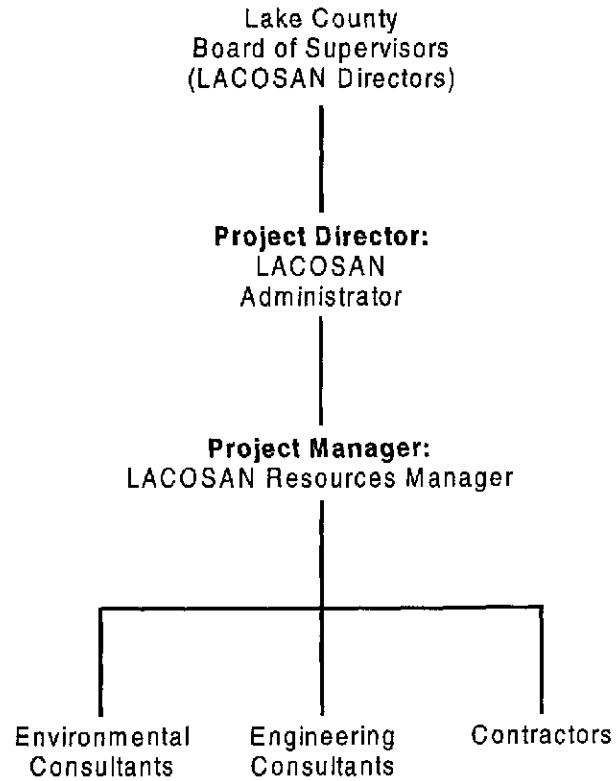
[illegible]

APPLICANT QUALIFICATIONS

The Lake County Sanitation District (LACOSAN) is a special service district operated by Lake County, California that provides wastewater services countywide. The district is governed by a board of directors, who also serve as the County's Board of Supervisors. LACOSAN operates two regional wastewater systems and two local systems, with a workforce of 40 employees and an annual budget of approximately \$5 million. The agency has over 25 years of experience administering state and federal financial assistance for capital improvement projects of the type proposed herein. It has just led an 11-member team in the successful construction and start-up of the \$45 million first phase of Basin 2000 that established wastewater recycling for upland habitat restoration and geothermal power generation.

The project director will be the LACOSAN Administrator, Steve Brodnansky, a senior County manager with over 25 years of experience directing capital improvement projects. The project manager will be Mark Dellinger, a senior County project manager with over 15 years of experience in capital improvement projects focused on environmental protection and restoration. These individuals performed the same duties for the successful first phase of Basin 2000 described above. LACOSAN will also retain, through competitive selection, qualified consultants and contractors to execute the technical portions of the work program. Figure 2 describes the project's management organization.

Figure 2
PROJECT MANAGEMENT ORGANIZATION



COMPLIANCE WITH STANDARD TERMS AND CONDITIONS

The applicant has reviewed all CALFED terms and conditions, and finds all of them to be agreeable.
Completed forms are attached.

Attachment A
LAKE COUNTY
RESOURCE MANAGEMENT COORDINATING COMMITTEE MEMBERS
Watershed Planning Organization

Lake County

Sanitation District
Flood Control District
Planning Department
Public Works Department
Environmental Health Department

Citizen Groups

Rimlanders
Audubon Society
Friends of Cobb
California Lake Management Society
Lake County Land Trust

Other Special Districts

Mendocino Resource Conservation
Napa Resource Conservation District
Yolo County Resource Conservation District
Yolo County Flood Control & Water
Conservation District
Solano County Flood Control & Water
Conservation District
Napa County Flood Control & Water
Conservation District

State Agencies

Department of Fish and Game
Department of Health Services
Department of Water Resources
Department of Conservation
Department of Parks & Recreation
Water Quality Control Board
State Lands Commission

Federal Agencies

Bureau of Land Management
Corps of Engineers
Environmental Protection Agency
Forest Service
Natural Resource Conservation Services
Bureau of Indian Affairs

Educational Institutions

Mendocino Community College
Yuba Community College
Lake County Office of Education

University of California

Cooperative Extension
Institute of Ecology, Davis
U.C. Berkeley

Tribal Councils

Big Valley Band of Pomo Indians
Middletown Rancheria
Lower Lake Rancheria
Robinson Rancheria
Scotts Valley Band of Pomo
Elen Indian Colony of Pomo Indians

City of Lakeport

City of Clearlake

**Certifications Regarding Debarment, Suspension and
Other Responsibility Matters, Drug-Free Workplace
Requirements and Lobbying**

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used or use this form for certification and sign. (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

**PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters -
Primary Covered Transactions**

CHECK ☐ IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -
Lower Tier Covered Transactions**

CHECK ☐ IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

04-2010
June 1996
(This form replaces 04-1963, 04-1964,
04-1965, 04-1966 and 04-1967)

PART C: Certification Regarding Drug-Free Workplace Requirements

CHECK IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.

Alternate I. (Grantees Other Than Individuals)

A. The grantee certifies that it will or continue to provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an ongoing drug-free awareness program to inform employees about—
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will —
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted —
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a) (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

230A Main Street

Lakeport, CA 95453

Check if there are workplaces on file that are not identified here.

PART D: Certification Regarding Drug-Free Workplace Requirements

CHECK IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL.

Alternate II. (Grantees Who Are Individuals)

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

DE-2010
June 1986
(This form replaces DE-1982, DE-1984,
DE-1986, DE-1988 and DE-1987)

**PART E: Certification Regarding Lobbying
Certification for Contracts, Grants, Loans, and Cooperative Agreements**

*CHECK IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND
THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT;
SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.*

*CHECK IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL
LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR
SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.*

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.


SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

Steve Brodnansky, Administrator

TYPED NAME AND TITLE

DATE 7/1/98

DI-2010
June 1989
(This form replaces DI-1063, DI-1064,
DI-1065, DI-1066 and DI-1067)